

# TB Times

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Director, Disease Control Programs

June 1998

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Director, Tuberculosis Control Program

Volume 10 Number 6

## A Note From Dr. Davidson

You may have noted the considerable press coverage in the last year or so concerning directly observed therapy (DOT) for the treatment of tuberculosis. The leaders of the World Health Organization have referred to DOT as a new tuberculosis breakthrough. What they mean is that applying DOT on a wide scale basis throughout the world would result in a dramatic decline in the number of new cases of tuberculosis as well as deaths from this killer of millions. DOT has been a staple here in the United States as well as Los Angeles County for years. We have, however, used it primarily in situations where the patient has clearly been non-compliant or is assumed to be at high-risk for non-compliance, i.e., homeless, alcoholics, etc. We have been somewhat complacent about applying this technique in a proactive manner, that is, assuming that everyone needs DOT until they have demonstrated that self-medication will be a safe and effective alternative. Most studies have shown that health care workers as well as others are not really very good at predicting who will be compliant and who will not. DOT also becomes more acceptable to the patient if it is clearly the standard of care for all patients. Tuberculosis is not only a public health threat to the community but also to the patient since disease can potentially permanently harm or even kill the patient. Shorter and intermittent treatment regimens make DOT both economical and reasonably convenient for the patient. Consider the fact that in the past, even after drugs were available, patients were frequently kept hospitalized for months with the assumption that they needed to be supervised and restricted from the stresses of life, etc. My knowledge of what went on in some of those hospitals indicates that despite the restrictions, there was still significant treatment non-compliance taking place. DOT wasn't and still isn't a consistent component of oral medication delivery in the hospital setting.

## Conferences

TB Conferences on the first Friday of the month are held in the Andrew Norman Hall of Orthopaedic Hospital, located at Adams Blvd. & Flower Street. The Physician Case Presentations on the third Friday of the month are held at the TB Control Program Office, Room 506A. Participants must sign-in to receive applicable CME credit. Late arrivals of 15 minutes for a 1 hour program or 30 minutes for a 2 hour program will not receive CME credit.

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July 3, 1998

9:00-10:15a.m.

"CANCELLED"

10:30-11:30a.m.

TB Case Presentation/Discussion

Hanh Q. Lê, M.D.

July 17, 1998

Physician Case Presentations

Hanh Q. Lê, M.D.

TB Control Classroom, #506A

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ERN Quarterly Inservice

August 7, 1998, 10:30-11:30

*"Strategies for Improving Patient Education -  
The ABCs of Adult Education"*

Bob Miodovski, M.P.H.

Orthopaedic Hospital

Andrew Norman Hall

Final '98 ERN Quarterly Inservice: November 6

*Congratulations to Dr. Shirley L. Fannin who was granted an honorary Doctorate of Science degree by her alma mater, Morehead State University, Morehead, Kentucky, on May 19, 1998.*

The attached graphs on page 4 summarize the findings regarding DOT in Los Angeles County during the past several years. The percentage of confirmed tuberculosis cases that had DOT initiated at the beginning of treatment has increased from just over 20% in 1993 to 55% in 1997. If you have a drug or alcohol problem or are homeless, you are more likely to have DOT initiated than the average. However, you are no more likely to be started on DOT if you are HIV positive than if you are negative even though an HIV positive status is essentially an absolute indication for DOT. The private health care system is much less likely to use DOT than our Public Health Clinics. These percentages do not include suspects who later were not confirmed as a case.

Taking this all into consideration and with the long term objective of eliminating tuberculosis from Los Angeles County as quickly as possible, the TB Control Program has established a new standard for the use of DOT in the medical care of TB patients in Los Angeles County. Those standards have been distributed to all the Public Health Centers and Staff and are printed in this issue of the ***TB Times***. Please review them carefully and let us know if you have any questions.

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### ***Incentives, Enablers and Self-Supervised Therapy***

Recently, a panel of experts in public health, behavior, and clinical management of tuberculosis patients reviewed several strategies employed to ensure treatment completion in tuberculosis patients.\* The panel reviewed the available literature on DOT, supervised therapy, compliance, adherence, treatment completion and case management for tuberculosis published between 1966 and 1996.

The review concluded that treatment completion rates in excess of 90% for pulmonary TB (as recommended by CDC) will most likely be achieved through treatment based on DOT coupled with treatment enablers and enhancers. The panel concluded that treatment plans that do not employ DOT are likely to fail to reach the established CDC goal.

The review found that patients treated with enhanced DOT (i.e., in combination with enablers or incentives) had a mean completion rate of 91%. Patients receiving DOT only had a mean completion rate of 86.3%. In contrast, patients placed on non-supervised therapy had a completion rate of only 61.4%.

Although the review indicated that little data was available, there is data to support that DOT is cost effective. DOT strategies were found to be 20% to 75% less expensive per case completing treatment as compared to non-supervised therapy. -D.G.

\*JAMA, March 25, 1998 – Vol. 279, No. 12

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### ***Directly Observed Therapy: The Big City Experience***

Although universal DOT has been widely accepted worldwide, Tuberculosis Control Programs in the United States have been slow to follow the successful path of our international partners. In 1991, during the peak of the resurgence of TB in New York City, only 137 TB cases were on DOT. This accounted for less than 5% of the overall cases in NYC. By 1993, however, NYC had increased the number of TB cases on DOT ten-fold and currently has a DOT rate of over 90%. In June of 1993, Chicago Tuberculosis Control began placing all newly reported TB cases on DOT.

Baltimore, Maryland provides the most salient example demonstrating the benefits of universal DOT. In 1978, the City of Baltimore TB Control Program began placing all TB cases followed by the Health Department Clinic on clinic-based DOT. Subsequently, in 1981, community based DOT was initiated.

Baltimore employs some unique strategies to achieve a target of universal DOT. More than 80% of all cases of TB in Baltimore are followed by Private Medical Doctors (PMD). In collaboration with the Health Department, DOT is provided by the Baltimore Health Department while the medical management is retained by the PMD. In addition to this successful collaboration, Baltimore has enacted a pharmacy reporting ordinance that requires that prescriptions for anti-tuberculosis drugs be reported to the Health Department. This reporting is in addition to provider and lab reporting requirements.

As a result of these interventions, completion rates increased while case rates dramatically dropped. During the period between 1981-1992, with universal DOT in place, TB morbidity decreased 29.5% in Baltimore. More striking, however, is the 51% decrease in the period between 1985-1992. When compared to a 5 city cohort surrounding Baltimore during the same time period, but not using universal DOT, the cohort experienced a 35.3% increase in TB morbidity. This data suggests TB morbidity can be decreased even in areas of generally increasing morbidity through the use of universal DOT. -D.G.

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## **Nutrition News**

Beginning with this issue, the Community Health Services Nutrition Program will contribute to the **TB Times** on a regular basis. This inaugural column offers nutrition resources to assist health care providers with nutrition referral sources, educational materials and guidance, and data as it relates to tuberculosis and nutrition.

Maslow's Hierarchy of Needs indicates that food, shelter, safety and water are fundamental human needs. Once the basic needs are fulfilled, other issues of daily life can take priority. The Nutrition Program has assembled an array of materials for tuberculosis health care providers to address these fundamental needs as described below.

The Nutrition Program offers a counseling tool in English and Spanish called, *"Eating Well Is The Best Defense."* This pamphlet describes "protective" eating, food safety & handling, and ways to maintain and/or increase weight.

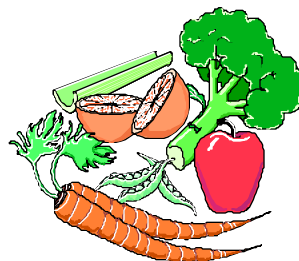
Since approximately 10% of TB clients are co-infected with HIV, referrals to AIDS Project Los Angeles (APLA), Project Angel Food, and other community and AIDS service organizations for Medical Nutrition Therapy are advised. To schedule an appointment with clients for Medical Nutrition Therapy or to find out what nutritional classes are being offered, contact the APLA registered dietitian at 213-993-1611. For meal services, contact Joya Melissa, R.D., at Project Angel Food 213-845-1816 or client services at 213-845-1800.

The directory, *"Food '97: The 1997 Directory to Free and Low-Cost Food Resources,"* will assist with locating food resources such as food pantries, free meals, food co-ops and meals-on-wheels for TB clients in need. The directory is indexed by zip codes which makes referrals simple to make. The directory is available through the Nutrition Program, while supplies last, compliments of the Los Angeles Coalition To End Hunger & Homelessness.

***The People's Guide on "How to Get Food & Money . . ." is available on line at***  
***www.peoplesguide.org.***

*"The People's 25th Guide to Welfare, Health & Other Services in Los Angeles County"* is available free on the internet or on disks or newsprint versions based on ability-to-pay. *"The People's Guide"* gives practical information about how to get food, money, and other

help from governmental programs and community services. The 60 page newsprint version costs 50¢ each and comes in several languages such as English, Spanish, Russian, Farsi,



Chinese, Cambodian, Armenian and Korean. You can fax, mail or call the Los Angeles Coalition to End Hunger & Homelessness, 1010 S. Flower St., Suite 401, L.A., CA 90015, phone 213-746-6511 or fax 213-746-4967.

For Nutrition News comments or articles, contact: Johanna-Asarian Anderson, M.P.H., R.D., Nutrition Program Manager or Molly Linek, M.P.H., R.D., Public Health Nutritionist II at 241 N. Figueroa St., Room 347, Los Angeles, CA 90012, Phone 213-250-8621 Fax 213-250-0612.

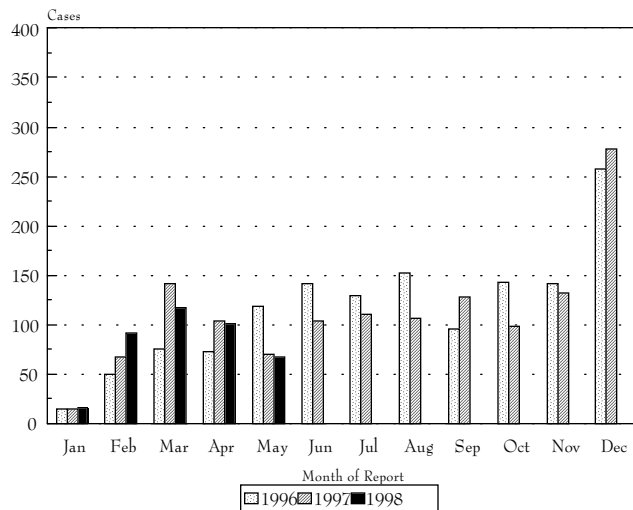
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## ***F.Y.I.***

We would like to congratulate Fatma Abdulla, APS, Refugee/Immigrant CBO Program, on receiving her Masters in Skilled Nursing from California State University Dominguez Hills.

The stork arrived once again at TB Control for the family of Elsa Rangerl, STC, Surveillance Unit. She welcomed a healthy and happy baby girl to the family, Laura Eliana, on May 28th!

## Los Angeles County Tuberculosis Control Tuberculosis Incidence By Month of Report, 1996-1998



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TB Times is a monthly publication to provide information to those interested in TB surveillance and TB Control Program activities. Please forward your articles, comments or suggestions to:

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## *TB Times*

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## June Topics of Interest...

- ⇒ Directly Observed Therapy: The Big City Experience
- ⇒ Incentives, Enablers & Self-Supervised Therapy
- ⇒ DOT Graphs, 1993-1997
- ⇒ Universal DOT Policy
- ⇒ Nutrition News!